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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/681,521

10/08/2003

Jason Harris

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EXAMINER

DENNISON, JERRY B

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/681,521

Applicant(s)

HARRIS ET AL.

Examiner

J. Bret Dennison

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/08/2003</u> . | 6) ☐ Other: _____ |

DETAILED ACTION

1. This Action is in response to Application Number 10/681,521 received on 08 October 2003.
2. Claims 1-25 are presented for examination.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-16 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. Claim 9 recites, "a computer readable medium having program instructions for transferring a data file." Applicant's specification states,

"The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can be thereafter read by a computer system. The computer readable medium also includes an electromagnetic carrier wave in which the computer code is embodied. Examples of the computer readable medium include hard drives, network attached storage(NAS), read-only memory, random-access memory, CD-ROMs, CD-Rs, CD-RWs, magnetic 5 tapes, and other optical and non-optical data storage devices. The computer readable medium can also be distributed over a network coupled computer system so that the computer readable code is stored and executed in a distributed fashion." See Applicant's Specification, paragraph [0036].

Therefore, paragraph [0036] provides evidence that Applicant intends the computer readable medium to include carrier waves, and as such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and as such is not a

process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a composition of matter.

See ANNEX IV "Computer-Related Nonstatutory Subject Matter", section (c) "Electro-Magnetic Signals" of the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", released 22 November 2005 in the Official Gazette ("Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101...These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.").

Therefore, claims 9-16 are non-statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites the limitation, "calculating a wait time based on a transfer rate provided by the first computing device." It is unclear to Examiner which device is performing this function.

8. Claim 1 recites the limitation, "waiting for the wait time before transferring a second portion of the data file to the first computing device." It is unclear to Examiner which device is performing this function.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-5, 8, 9-10 12-13, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Mogul (U.S. 6,560,243).

9. Before a detailed mapping of the claims, a discussion about bandwidth and wait time should be made to clarify Examiner's interpretation of the claims with respect to the prior art. Bandwidth, in a networking environment is defined as the data transfer capacity, or speed of transmission, usually measured in bits per second (bps) [see Microsoft Computer Dictionary, Fifth Edition]. For example, if a client's bandwidth is 10Mb per second (10Mb/s), and the server is sending a 100Mb file to the client, at a packet size of 5Mb, then the server could only send two packets per second, meaning the server would have to wait half of a second per transmission of each packet, i.e. wait time. The server must determine this wait time in order to send out the packets at the target bandwidth. Therefore, if the server uses a target bandwidth at which to send data, i.e. packets or streaming data, the server inherently knows the wait time it would

have to "wait" before it transmits each packet/portion of the file. Therefore, the server must use the specific wait time for a specific bandwidth in order to successfully transmit packets at the target rate.

10. Regarding claims 1 and 9, Mogul disclosed a method for transferring a data file between a first and a second computing device, comprising:

calculating a wait time based on a transfer rate provided by the first computing device (Mogul, col. 1, lines 59-60, Mogul disclosed the receiver enforcing its own bandwidth allocation policy; col. 2, lines 5-6, The receiving system determines the target bandwidth to be allocated to the flow of data packets; col. 2, lines 11-13, the sending system transmits the data at a rate approximating the target bandwidth, inherently calculating the wait time as described in the above interpretation in paragraph 9);

transferring a first portion of the data file from the second computing device to the first computing device (Mogul, col. 2, lines 21-26, Mogul disclosed transferring packets from the data flow at the rate); and

waiting for the wait time before transferring a second portion of the data file to the first computing device (Mogul, col. 2, lines 21-26, Mogul disclosed transferring packets from the data flow at the rate).

11. Regarding claims 2 and 10, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9, including: determining a size associated with the first portion and the second portion; comparing the size associated with the first

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portion and the second portion to the size of the data file; and if the size associated with the first portion and the second portion is less than a size of the data file, then the method includes waiting for the wait time prior to transferring a third portion of the data file to the first computing device (Mogul, col. 2, lines 21-26, Mogul disclosed the server transferring packets from the data flow at the rate; In order to do this, the server would have to know the sizes of each packet in the data flow, and would also have to know the size of the complete file. Otherwise, incorrect transmission of the files would occur; Since the server maintains bandwidth at the target rate, it must wait the specific time period before sending each portion of the file, i.e. each packet, as described in paragraph 9, above).

12. Regarding claims 4 and 12, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9, including adjusting the wait time during the transfer based on periodic updates of the transfer rate provided by the first computing device (Mogul, col. 4, lines 44-46).

13. Regarding claims 5 and 13, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9, including dividing the data file into one of equal and unequal portions (Mogul, col. 1, lines 59-60, packets).

14. Regarding claims 8 and 16, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9, including: determining the transfer rate from

transfer rate parameters selected from the group consisting of an amount of processor power availability of the client, an amount of network bandwidth availability, and an amount of memory availability of the client (Mogul, col. 2, lines 5-15, 20-26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6-7, 11, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul (U.S. 6,560,243).

15. Regarding claim 3 and 11, Mogul disclosed the limitations, substantially as claimed, as described in claims 2 and 10. Mogul did not explicitly state wherein the method operation of determining the size associated with the first portion and the second portion includes, adding a first size associated with the first portion to a second size associated with the second portion.

However, since Mogul disclosed the server transmitting packets belonging to a data flow, as well as streaming data (Mogul, col. 4, lines 30-34) it would have been obvious to one of ordinary skill at the time the invention was made that the server would have to know the sizes of each packet in the data flow, and would also have to know

which packets have been transmitted, and therefore be able to know how much data has been transmitted in reference to the size of the data in order to determine when the complete file has been successfully sent, for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55) and receiving the complete data flow successfully.

16. Regarding claims 6 and 14, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9. Mogul did not explicitly state wherein the method operation of calculating the wait time includes, dividing a value associated with a size associated with the first portion of the data file by the transfer rate.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the server must determine how long to wait between sending each packet by dividing it by the rate in order to transfer packets at the target bandwidth (as described in paragraph 9, above) for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55).

17. Regarding claims 7 and 15, Mogul disclosed the limitations, substantially as claimed, as described in claims 1 and 9. Mogul did not explicitly state wherein the method operation of calculating the wait time includes, defining the wait time from both a size associated with the first portion of the data file and the transfer rate.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the server must determine how long to wait between

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sending each packet by dividing it by the rate in order to transfer packets at the target bandwidth (as described in paragraph 9, above) for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55).

18. Regarding claim 17, Mogul disclosed a system for transferring data files between computing devices, comprising:

a first computing device configured to determine a transfer rate (Mogul, col. 2, lines 5-15, 20-26);

and a second computing device configured to regulate a transfer rate provided by the first computing device (Mogul, col. 2, lines 5-15, 20-26).

Mogul did not explicitly state the second computing device including, transmission regulation circuitry configured to calculate a wait time defined from both a block size of a portion of the data files being transferred between the first computing device and the second computing device and the transfer rate.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the server device of Mogul would have to include circuitry to determine the wait time between portions/packets based from the size of each packet and the bandwidth, in order to successfully transmit each packet at the targeted bandwidth (as described in paragraph 9, above), for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55).

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19. Regarding claim 18, Mogul disclosed the limitations, substantially as claimed, as described in claim 17. Mogul did not explicitly state wherein the transmission regulation circuitry includes, logic for dividing the block size by the transfer rate to derive the wait time.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the server must determine how long to wait between sending each packet by dividing it by the rate in order to transfer packets at the target bandwidth (as described in paragraph 9, above) for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55).

20. Regarding claim 19, Mogul disclosed the limitations, substantially as claimed, as described in claim 17. Mogul did not explicitly state wherein the second computing device is configured to determine a running total of portions of the data files transferred to the first computing device;

and if the running total is less than a total size associated with the data files, then the second computing device is configured to wait for the wait time prior to transferring another portion of the data files to the first computing device.

However it would have been obvious to one of ordinary skill in the art at the time the invention was made that the server keeps track of the packets it sends to the client in order to successfully transmit the complete file/data flow, as well as to transfer packets at the target bandwidth (as described in paragraph 9, above) for the benefit of

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allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55).

21. Regarding claim 20, Mogul disclosed the limitations, substantially as claimed, as described in claim 19. Mogul did not explicitly state wherein the second computing device is further configured to add sizes of the portions of the data files transferred to the first computing device.

However, since Mogul disclosed the server transmitting packets belonging to a data flow, as well as streaming data (Mogul, col. 4, lines 30-34) it would have been obvious to one of ordinary skill at the time the invention was made that the server would have to know the sizes of each packet in the data flow, and would also have to know which packets have been transmitted, and therefore be able to know how much data has been transmitted in reference to the size of the data in order to determine when the complete file has been successfully sent, for the benefit of allowing the receiving system to achieve its own bandwidth allocation policy (Mogul, col. 1, lines 52-55) and receiving the complete data flow successfully.

22. Regarding claim 21, disclosed the limitations, substantially as claimed, as described in claim 17, including wherein the second computing device is further configured to adjust the wait time during the transfer based on periodic updates of the transfer rate provided by the first computing device (Mogul, col. 4, lines 44-46).

23. Regarding claim 22, disclosed the limitations, substantially as claimed, as described in claim 17, including wherein the second computing device is further configured to divide the data files into one of equal portions and unequal portions for transmission to the first computing device (Mogul, col. 1, lines 59-60, packets).

24. Regarding claim 23, disclosed the limitations, substantially as claimed, as described in claim 17. Mogul also disclosed that the client being a device including a CPU, user interface, and memory (Mogul, col. 3, lines 35-45).

Mogul did not provide the detail as to specific types of computers.

This would have motivated one of ordinary skill in the art to search the prior art for devices that can satisfy the requirements of the client device of Mogul.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a laptop, PDA or cell phone as the client device since these devices all contain the hardware required in the described client device.

Regarding claim 24, disclosed the limitations, substantially as claimed, as described in claim 17.

Mogul did not explicitly state wherein the system is a video conferencing system.

In an analogous art, Roy disclosed a multimedia conferencing service that provides services with selective performance parameters, delivering video signals to users based on hardware, software, and network limitations, as well as user preferences, including bandwidth (Roy, see Abstract).

Mogul provides a general system of allowing the receiving end to control the bandwidth. Roy provides such functionality implemented with a video conferencing system.

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate the video conferencing functionality of Roy into Mogul for the purpose of providing each user of the conference with the highest quality performance capability possible to that user's system (Roy, col. 1, lines 25-35)

25. Regarding claim 25, disclosed the limitations, substantially as claimed, as described in claim 17, wherein the transfer rate is determined from transfer rate parameters selected from the group consisting of an amount of processor power availability of the first computing device, an amount of network bandwidth availability, and an amount of memory availability of the first computing device (Mogul, col. 2, lines 5-15, 20-26).

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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